

Essential Oils - How and Where to Use Them

Story at-a-glance

- ▶ Essential oils may help relieve symptoms of autism and attention deficit hyperactivity disorder (ADHD)
- ▶ Essential oils may relieve stress and anxiety, help you sleep, support pain relief and boost energy
- ▶ Instructions include for how to use essential oils via massage, inhalation, bath or facial lotion

By Dr. Mercola

Essential oils are concentrated, aromatic plant extracts that have been used for thousands of years for emotional, cosmetic, medical and even spiritual purposes. The term "essential oil" actually comes from the idea of "quintessential oil."

Aristotle believed that in addition to the four physical elements (fire, air, earth and water) there was a fifth element, quintessence. This was considered to be the "spirit" or life force of the plant.¹

Today, essential oils are extracted from plants via two primary methods, distillation, which has been used since ancient times, and expression or cold pressing, which is used to extract citrus essential oils.

Back in the 17th and 18th centuries, physicians including Hippocrates, Galen, and Crito, promoted the therapeutic use of scents, . Even the plague was treated with fragrances!²

Pharmaceuticals edged out the use of essential oils in the 19th century, but now, however, they're making a strong comeback.

What Are the Benefits of Using Essential Oils?

There are probably as many uses for essential oils as there are varieties, but research shows particular promise in relieving stress, pain and nausea, stabilizing your mood, and improving sleep, memory and energy levels.

As noted by the National Association for Holistic Aromatherapy (NAHA):³

"It [Aromatherapy] seeks to unify physiological, psychological and spiritual processes to enhance an individual's innate healing process."

Anxiety is one health condition for which essential oils may be particularly beneficial.

A systematic review of 16 randomized controlled trials examining the anxiolytic (anxiety-inhibiting) effects of aromatherapy among people with anxiety symptoms showed that most of the studies indicated positive effects to quell anxiety (and no adverse events were reported).⁴

Sweet orange oil, specifically, has been found to have anxiety-inhibiting effects in humans, supporting its common use as a tranquilizer by aromatherapists.⁵

Further, a blend of peppermint, ginger, spearmint and lavender essential oils has been found to help relieve post-operative nausea,⁶ while lavender aromatherapy has been shown to lessen pain following needle insertion.⁷ Essential oils have even been suggested as a replacement for antibiotics.⁸

Essential Oils May Impact Your Brain's Emotional Center

According to the National Cancer Institute's PDQ online database, one way essential oils work is via your brain's limbic system:⁹

"The effects of aromatherapy are theorized to result from the binding of chemical components in the essential oil to receptors in the olfactory bulb, impacting the brain's emotional center, the limbic system.

Topical application of aromatic oils may exert antibacterial, anti-inflammatory, and analgesic effects.

Studies in animals show sedative and stimulant effects of specific essential oils as well as positive effects on behavior and the immune system. Functional imaging studies in humans support the influence of odors on the limbic system and its emotional pathways."

Essential oils also contain three different types of medicinal organic compounds called terpenes, each with its own set of benefits:

- Phenylpropanoids have antibacterial, antifungal, and antiviral activity. As noted by Healthy Holistic Living, "phenylpropanoids clean the receptor sites on the cells. Without clean receptor sites, cells cannot communicate, and the body malfunctions, resulting in disease."¹⁰

Oils that contain this type of terpene include: [clove](#), cassia, basil, cinnamon, oregano, anise, and peppermint.

- Monoterpenes, which are found in most essential oils, help "reprogram miswritten information in the cellular memory."¹¹
- Sesquiterpenes help deliver oxygen to your tissues, which makes it more difficult for viruses, bacteria, and potentially even cancer cells, to survive.

Essential oils that contain sesquiterpenes include cedarwood, vetiver, [spikenard](#), sandalwood, black pepper, patchouli, myrrh, ginger, and frankincense.

Essential Oils May Help Relieve Autism Symptoms

Many parents report success in using essential oils to ease symptoms associated with [autism](#), especially at bedtime or while transitioning from one activity to another (which is often difficult for autistic children).

It may not work for everyone, but it's natural, non-invasive and easy to apply, so there are far more advantages to trying it than not. Among the success stories is one mother who diffuses Roman chamomile into her son's room at night, which has helped him to sleep.

She also uses frankincense, orange, or vetiver (a type of Indian grass). She told The Epoch Times:¹²

"Vetiver really seems to calm him. When I get vetiver oil on him, it can pretty quickly end the meltdown. I always have it handy so I can get him to breathe it in. I do see a shortened time period of rage when he is having a meltdown. It has been a definite help."

Ohio State University (OSU) researchers are even planning a study to determine if essential oils may help with emotional and behavioral challenges faced by children with autism. It's likely they could help with other conditions as well.

Essential Oils Show Promise for Relieving Symptoms of ADHD, Boosting Emotional Health

Research by Dr. Terry Friedmann showed, for instance, that [vetiver oil](#) was beneficial for children with attention deficit hyperactivity disorder (ADHD). When the children inhaled the oil regularly for 30 days they had improved brain wave patterns and behavior and did better in school.

Eighty percent of the children also improved when using cedarwood oil similarly.¹³ Since there is variation in how different people respond to different oils, the Ohio State researchers plan to use a *blend* of oil in their autism study. The Epoch Times continued:¹⁴

"There is some trial and error involved ... parents have found that an essential oil that works for one kid's ASD [autism spectrum disorder], may not necessarily work for another.

So instead of just looking at single oils, OSU researchers will evaluate two mixtures of 18 essential oils typically used by parents for treating ASD symptoms.

'We believe the blends improve the ability to relax even more so than an individual oil by itself,' [OSU researcher Dr. Jill] Hollway said.

'Some people only use lavender oil, or sandalwood, but we are studying multiple oils because we feel that this would give us an increased boost of relaxation.'

The infographic that follows, from Holland & Barrett, shows additional ways you can use essential oils to help manage your emotions.^{15,16}

How to Use Essential Oils

If you're using essential oils simply because you like their scent, they should be diluted in a carrier oil or water (for misting) first before you apply them to your skin. Contrary to popular belief, to get the most scent out of an essential oil fragrance on your body, you needn't apply it to your pulse points.

It's commonly thought that increased heat in these areas helps to diffuse the scent, but in reality the temperature of your skin doesn't vary much from place to place. To get the most lasting scent, spray a mixture of essential oil and water onto your shirt collar or hair, where the oils will take longer to evaporate.¹⁷

NAHA has compiled instructions for additional ways to use essential oils, including via massage, inhalation, bath or facial lotion, as follows.¹⁸ For more information on which essential oils to use for different purposes, check out the [Ultimate Guide to Herbal Oils](#).

Massage Oil

For infants and young children:

.5 to 1% dilution = 3 to 6 drops of essential oil per ounce of carrier

For adults:

2.5% dilution = 15 drops of essential oil per ounce of carrier

3% dilution = 20 drops of essential oil per ounce of carrier

5% dilution = 30 drops of essential oil per ounce of carrier

10% dilution = 60 drops of essential oil per ounce of carrier

Essential oils used in massage blends are often used for:

Stress/anxiety
Headaches/migraines
Insomnia
Chronic or acute pain relief
Arthritis & rheumatism (sub-acute phase)
Chronic muscular/joint aches and pain
Pregnancy and childbirth massage
Reducing inflammation
Enhancing immunity
Relieving muscle spasms
Relax and soothe the nervous system
Aid in the treatment of sprains, strains, and repetitive movement injuries

Steam Inhalation

Place 3 to 7 drops of essential oil into boiling water. Some essential oils to consider include eucalyptus, thyme, lemon and tea tree. Cover head with towel and breathe through the nose. Keep eyes closed! Steam inhalation of essential oils may be used for:

- Congestion in upper respiratory tract (cold or flu)
- Sinus infection or sinusitis
- Enhancing respiratory function

Bath

Add 2 to 12 drops (depending on essential oil) into a teaspoon of honey, whole milk, vegetable oil or other dispersing agent then add to bath once you are in the bath. This is often used to:

Reduce stress/anxiety
Alleviate muscular aches, pains, and tension
Soothe mental or physical fatigue
Stimulate circulation
Enhance lymph circulation
Reduce pain and stiffness
Increase local circulation
Improve tone and health of skin
Aid detoxification

Facial Cream

You can purchase unscented facial creams or body lotions to add essential oils to or create a facial oil by using a variety of vegetable/herbal oils [such as coconut oil] and then adding essential oils into the mix.

For adults:

Sensitive skin: .5 to 1 percent dilution = 3 to 6 drops per ounce

Normal, healthy skin: 1 to 2.5 percent dilution = 6 to 15 drops per ounce

Essential oil facial creams may help:

Enhance wound healing
Influence and slow aging of skin
Scar reduction and improve appearance
Support and enhance immune cells of the skin
Balance sebum production
Aid the process of detoxification in the skin
Increase local circulation
Improve tone of skin
Encourage hydration of the skin, when used in conjunction with hydrosol/water or cream.
Soften and soothe the skin
Address emotional issues

Comments

phogphire

Wow, that's really interesting, I've been applying Vetiver oil and Cedarwood to my neck and on my beard and mustache mainly because I really like the smell. I didn't realized that it had been studied for ADHD, I've researched a variety of material on ADHD, some of the best info I've found to narrow down the sub-type of ADHD and most beneficial treatment (natural first then Rx Stims or anti-depressants or other) has been Dr. Amen's materials, (Dr. Atkins in his Vita-nutrient book also has some excellent material as well).

Yet that said more anecdotal info, is that I did notice that the above Essential oils does help my focus, this with Diet (I follow blood type diet for Type O - a carnivore -lean, grass fed ruminants and veggies, cutting most dairy, many grains (i.e. wheat -except sprouted, no corn, but a few grains like Kamut and a few others). I digress, diet, HITT anaerobic exercise, proper sleep and some key supplements (DLPA [D&L forms of Phenylalanine], L-tyrosine, Dopa Mucna, SAME, Mg Threonate, Omega 3 [High DHA to EPA ratio], L-Theanine, Creatine and when need if I'm to stimulated and thus over-focused I will mellow back with some St John's wort). This I've found after lots of trial and error and reading. Good to know about the Essential oils, I may try some on my youngest child.

Posted On 01/21/2016

Almond

Don't overdo it on the cedar oil. EOs are a very individualized thing, maybe more so than other forms of herbs as to type, dose, method of use, age appropriateness, dilution, etc. Some oils are not recommended for young children. You will want to consider quality. You should be aware of photosensitivity with some oils. Do take time to educate yourself. Having said all of that, I think EOs are terrific and have much greater potential for healing than many prescription drugs, esp. antibiotics. Nature abides.

Cedarwood, like many remedies, should be avoided in pregnancy. I seem to recall that frequent of high dose use can impair organ function--I forget whether it is kidney or liver, but this would make sense being that it is contraindicated in pg. You would prob need to be very careless or use a significant amount to experience problems. Although CW is GRAS, I would discourage people from becoming dependent on any one EO, but to rotate remedies. This can also be helpful therapeutically.

Cedar is very helpful in compounding arthritis formulas. I prefer not to use it alone, but blend it.

Hubby and I restored an old trunk that prob dates back to the 1700s--had been in the family quite a while and would have totally fallen apart without our efforts. he lined it with thin cedar boards. They quickly lost their scent, so I swiped them lightly with cedar oil--not enough to leave an oily streak. Something else I have done when storing woll if to place dried lavender in a muslin bag.

Posted On 01/21/2016

Guillermou

Phogphire, you've found a good way to improve your health. Among the supplements it can also

be useful the phosphatidylserine. Phosphatidylserine (PS) is a naturally occurring phospholipid nutrient that is most concentrated in organs with high metabolic activity, such as the brain, lungs, heart, liver and skeletal muscle. PS is located mainly in the internal layer of the cell membrane and has a variety of unique regulatory and structural functions. It modulates the activity of receptors, enzymes, ion channels and signalling molecules and is involved in governing membrane fluidity. PS is considered to be one of the most important brain nutrients beneficially influencing numerous neurotransmitter systems, such as acetylcholine, dopamine, serotonin and norepinephrine. PS has been shown to counteract the stress-induced activation of the hypothalamic-pituitary-adrenal axis when faced with a physical stressor.

PS supplementation resulted in significant improvements in: ADHD, AD and HD, short-term auditory memory; and inattention (differentiation and reverse differentiation, and inattention and impulsivity). No significant differences were observed in other measurements and in the placebo group. PS was well-tolerated and showed no adverse effects.

Conclusions PS significantly improved ADHD symptoms and short-term auditory memory. PS supplementation might be a safe and natural nutritional strategy for improving mental performance suffering from ADHD. "The effect of phosphatidylserine administration on memory and symptoms of attention-deficit hyperactivity disorder: a randomised, double-blind, placebo-controlled clinical trial". onlinelibrary.wiley.com/.../full

Posted On 01/21/2016

grulla

Yeah "Almond", I/we have always used cedar oil in place of mothballs. Is that where you are coming from? www.amazon.com/s/?ie=UTF8&keywords=cedar+oil+for+moths&tag=goo..

Posted On 01/21/2016

Guillermou

Essential oils, more specifically, to repel mosquitoes are: citronella, geranium, lavender and eucalyptus. The formula 40 ml of almond oil or any vegetable oil we have at hand, virgin olive or sunflower worth us. 20 drops of essential oil In a glass bowl, porcelain, stainless steel put the vegetable oil of choice, add drops of essential oil and stir with a glass rod or stainless steel. It is not advisable to use wood as being porous absorb part of the preparation.

Posted On 01/21/2016

seg

Good recipe Gui, wood and plastic spoons are not definitely not advisable for stirring.. Some swear by having a high level of the B vitamins repels the mosquitoes as well...This might be good especially for places like Brazil that are currently being plagued with the Zika virus..

www.bbc.com/.../world-latin-america-35368401

Posted On 01/21/2016

Guillermou

Seg, did not know the vitamin B. This is also quite effective. We have tested it on holidays. Repellent cloves They say it is the most effective mosquito repellent. You will need baby shampoo, 1 liter of water and 30 units of cloves. Takes an infusion with nail and water, strained and poured into the shampoo until a homogeneous mixture is obtained. Applies to all skin that is exposed to insects (arms, face and feet). Also it works with half a lemon with nails hammered into pulp.

Posted On 01/21/2016

Guillermou

Seg, practical confirmation of vitamin B to prevent bites mosquitos.de some tourists. We have made two trips to the Amazon family in the first, we only use chemical repellent spray. One of us was stung twice by mosquitoes, leaving an inflamed lesion more than 2 cm in diameter. On our second trip, a few years later, one of the most beautiful places I've seen in my life - Canaima, in the heart of the Venezuelan Amazon Rainforest - family we did many years ago, my grandmother ran every morning our cabins (we were nine people in total, so we were spread over several huts) to give each a dose of Vitamin B1 precisely to avoid bites. Result: After a week in the jungle - the place where mosquitoes are more like helicopters, and their bites swell quite severely - none of the nine people who were there was not a single bite. And that without applying repellent spray or sleep with bed nets.

Posted On 01/21/2016

Guillermou

Essential oils distilled from members of the genus Lavandula have been used both cosmetically

and therapeutically for centuries. Although there is considerable anecdotal information about the biological activity of these oils much of this has not been substantiated by scientific or clinical evidence. Among the claims made for lavender oil are that it is antibacterial, antifungal, carminative (smooth muscle relaxing), sedative, antidepressive and effective for burns and insect bites. In this review we detail the current state of knowledge about the effect of lavender oils on psychological and physiological parameters and its use as an antimicrobial agent. Although the data are still inconclusive and often controversial, there does seem to be both scientific and clinical data that support the traditional uses of lavender. However, methodological and oil identification problems have severely hampered the evaluation of the therapeutic significance of much of the research on *Lavandula* spp. These issues need to be resolved before we have a true picture of the biological activities of lavender essential oil.

www.ncbi.nlm.nih.gov/.../12112282

Posted On 01/21/2016

seg

Yes Gui many swear by the B vitamins, i believe it is even better taking a B-complex formula a few weeks before going to places that are know to have mosquitos..But like everyting in life this may not work for everyone as the issue of who get's bitten and who don't, well, the reviews are always mixed and this goes back to my belief in individuality..What may work for one may not work for another..Many talk about smells, body heat, pheromones and the role individual hormones play..So if this works great that's fantastic, if not folks just need to research and try to find other preventatives.. always believe there is something out there that will work..

Posted On 01/21/2016

Guillermou

Magazine "Very Interesting" Why they bite some people more mosquitoes than others? choose their victims based on the amount of carbon dioxide (CO₂) emitted to breathe and not, as stated in the popular belief, the "sweetness" of the blood, according revealed a study recently published in Nature. A human being it produced every day about one kilogram of CO₂, and every time you exhale-about 13 times per minute emits more than one hundred milligrams of this gas. Mosquitoes detect a pulsating stream of CO₂, from which they infer that there is behind "fresh blood" to suck. The carbon dioxide emitted breathing is higher in adults than in children, and its amount varies according to diet and exercise to be followed.

In fact, entomologists at the University of Florida (USA) have developed traps for the insects that emit carbon dioxide as would a person or an animal. The lactic acid which issued or breathing through sweat also attracts these insects. Taller people and pregnant women emit more CO2 and lactic acid, so they are "white" perfect mosquitoes. People just do intense physical exercise are also very attractive to insects.

Posted On 01/21/2016

Donnamac

I'm a believer and a user, and essential oils are my medicine chest. I will admit, I don't know enough..but I know some. I do a daily injection and use Lavender for that, and it says above it makes "needle insertion easier"...Damn straight it does! I am a walking testament to that fact. Peppermint (nausea and headaches), Wintergreen (I have MS..this is a must for muscle spasms), Rosemary (hot, itchy spot on scalp? Constant itch? a drop does it), Lemon (bug bites, scrapes, antibacterial, antimicrobial), Tea Tree (got zits? apply a drop..it's gone by evening) and several blends all at hand. I use them on me, in me, in cooking/baking, etc. I simply cannot imagine life without my oils.

Posted On 01/21/2016

Julianne

Some oils also show promise for relieving high blood pressure: www.care2.com/.../ess

Posted On 01/21/2016

njlady

Hi, the page on that link says that "page cannot be found anymore"..but there is probably other info on line for the blood pressure essential oil link

Posted On 01/21/2016

mikecarrie01

I've noticed that quality is a huge issue. I've used lesser quality oils and received little benefit

compared to the higher quality oils.

Posted On 01/21/2016

babscanuk

I have been using Tea Tree Oil for many years for pain relief (I suffer from osteo-arthritis and fibromyalgia). To apply I will mix it with some unscented body lotion. Works wonders.

I also use it as a mouth wash (2 drops with some water); antiseptic for bug stings and cuts; if I get a cold that decides to settle in my chest I will also use some eucalyptus oil.

Posted On 01/21/2016

holdfasthope

""Studies in animals show sedative and stimulant effects of specific essential oils as well as positive effects on behavior and the immune system. Functional imaging studies in humans support the influence of odors on the limbic system and its emotional pathways.""

this is huge for persons suffering from MCS, chronic fatigue, EMF sensitivity, food intolerances, fibromyalgia, environmental sensitivities. like I mentioned in yesterdays article about EMF exposure, people who are sensitive to EMF's, lots of foods, chemical sensitive, food intolerances and chronic fatigue likely have limbic system brain damage. similar to the damage done by a stroke but not as serious, this is minor damage or to look at it from a more optimistic perspective. .the wires and emotional/stress pathways in your brain have created dysfunctional stress reactive patterns and overreaction to stimuli, thus causing all the environmental, EMF, food sensitivities.

there is a limbic system retraining/rewiring program by Dr Annie Hopper that takes these dysfunctional reactive patterns in the brain and finds alternate routes or so called "roads" in your brain so it stops this consistent negative loop pattern and turns "off" your flight or fight response and returns your automatic functions like rest/digest and to repair it's like a button got pushed and got "stuck" on in your brain, leaving your sympathetic or flight or fight response "ON", the goal is to rewire the brain or to stop this negative loop pattern in your limbic system and put it back to normal.

Posted On 01/21/2016

Alex__

I used an essential oil recipe for athlete's foot that I found online: equal parts geranium, lavender, tea tree, and oregano essential oils. Seems to have nuked it for good, unlike the sprays and creams from the drug store.

Posted On 01/21/2016

allunoisrong

I have always found Young Living to be of utmost integrity.

Posted On 01/21/2016

ajp1991

Thank you Dr. Mercola for the practical advice near the end! Also very interesting that they seem to receive autism/ADHD symptoms. I must consider their use. Finding essential oils is easier than it used to be at least. My local grocery store has an aromatherapy shelf in their personal care aisle. Several years ago, I'd never even heard of essential oils, let alone seen many options on sale in ordinary stores. You're right - they do seem to be making a come back.

Posted On 01/21/2016

TuesdayPillow

I'm glad that ingestion was not suggested. I hear of too many people ingesting ... and acting as though putting an oil with water will dilute. Oil and water don't mix, so ... yeah, there are a lot of people out there handing out super potent oils, like oregano and cedar, not warning anybody about what isn't best for kids, etc.. .

Posted On 01/21/2016

depadoo

So what brands would you suggest or book? I have many doTerra and ameo

Posted On 01/21/2016

PennyRoy

Hi tuesday, There are EO you can ingest. I 'ingest Oil of Oregano with liquid Coconut Oil. I also have a few drops of peppermint oil in my toothpaste of CO and baking soda. I have a few drops of Lavender Oil in my whipped CO for face and body, etc.

Posted On 01/21/2016

Brazil123

Young Living is a multilevel marketing / Pyramid scheme and I am not sure their quality is good.

Posted On 01/21/2016

allunoisrong

Doterra is ex-young Living execs. They have brought nothing new to the game.

Posted On 01/21/2016
